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EXAMINER

HORABIK,M

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ART UNIT 2604 | PAPER NUMBER 8

DATE MAILED: 07/27/92

THIS IS A COMMUNICATION FROM THE EXAMINER IN CHARGE OF YOUR APPLICATION
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire three month(s), — days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☒ Notice of References Cited by Examiner, PTO-892.
2. ☒ Notice re Patent Drawing, PTO-948.
3. ☒ Notice of Art Cited by Applicant, PTO-1449.
4. ☐ Notice of informal Patent Application, Form PTO-152.
5. ☐ Information on How to Effect Drawing Changes, PTO-1474.
6. ☐ _____

Part II SUMMARY OF ACTION

1. ☒ Claims 1-154 are pending in the application.
   Of the above, claims 133-154 are withdrawn from consideration.
2. ☒ Claims 1-66 have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 67-132 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☒ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed on _____, has been ☐ approved. ☐ disapproved (see explanation).
12. ☒ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☒ been filed in parent application, serial no. 07/218203 ; filed on July 13, 1988
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

PTOL-326 (Rev. 9-89)

1. The election in paper No. 5 is acknowledged. However, it is noted that the election was not formally made with or without traverse. Since arguments have been made as to the validity of the restriction, it is assumed that the election is made with traverse.

2. Applicant's election with traverse of Group I in Paper No. 5 is acknowledged. The traversal is on the ground(s) that the inventions are not independent nor distinct because the display device of Group I operates by means of the electron emitting device of Groups II and III for stimulation of the phosphor. Groups II and III utilize dispersion of film particles in the method of preparing the electron emitting device used in the display device of Group I. The method of displaying images of Group IV requires the display device of Group I. This is not found persuasive because the claims as a whole are not related. Applicants are merely rlying on selected portions of the claims for similar inventions. The facts are Group I is directed to a display device which is a product. Groups II and III are two different methods of making an electron emitting device which are method claims directed to a product (electron emitting device) that is different than the product of Group I (display device). Group IV is directed to a method of using a product which is a display device that is different as claimed from the display device of Group I. Note the fluorescent member, wiring

electrodes, and modulating electrodes of claims 145-154. None of these features are evident or appear to be required in the display device as claimed of Group I.

The requirement is still deemed proper and is therefore made FINAL.

3. Submission of figures 39A-C on April 27,1992 have been approved by the examiner. Submission of pages 88 and 89 on April 27,1992 are not being entered, since applicants intend on canceling all of the claims on these pages. The examiner has renumbered pages 90-103 to 89-102 of the original specification.

4. Applicant is reminded of the proper language and format of an Abstract of the Disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said", should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the instant application is not directed to the invention of an electron emitting device. Also, the reference to a method must be deleted since the elected invention is not directed to a method.

6. The drawings are objected to because Figures 39B and C show a line directed to the substrate but no identification number. Correction is required.

7. The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the phosphor must be shown or the feature canceled from the claim. No new matter should be entered.

8. The disclosure is objected to because of the following informalities: There is no summary of the invention directed to a display device commensurate with the elected claimed invention (see 37CFR 1.73) Also, the Brief Description of the Drawings fails to specify all of the numbers of the figures (e.g. 3a,3b, 6a,6b,etc.) see 37CFR 1.74. Appropriate correction is required.

9. Claims 67-132 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. All of the claims are incomplete for failing to suggest essential elements and necessary structural cooperative relationship of these elements thus rendering the claims confusing and unclear and raises the question of operability. As claimed, there is no structural relationship between the phosphor and the electron emitting device (see MPEP 706.03(f)). Where, with respect to the display device, are these elements located?

Also, without any structural relationship claimed between these elements, it is not understood how the emitted electrons can stimulate the phosphors.

11. In claim 96 line 4 the phrase "said electrode layer" lacks antecedent basis. It is also not understood how a layer of an electron emitting material can be between an electrode layer.

12. In claims 117-124 the phrase "said semiconductor layer" lacks antecedent basis. Only a semiconductor has been established.

13. In claims 125-132 the phrase "said electron emitting devices" also lacks antecedent basis and is incorrect. The independent claims have all positively established that there is only one electron emitting device in the display device. These claims 124-132 contradict what has already been established.

14. Claims 67-99, 101-107, and 109-116 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-38 and 40-49 of U.S. Patent No. 5,066,883 in view of Klopfer et al.

15. Patent No. 5,066,883 claims the electron emitting device as claimed in the present application. The only difference is in regards to the electron emitting device being in a display with a phosphor. However, it is well known in the display device art to use an electron emitting device in a display device with phosphor as evidenced by Klopfer et al. (see column 3 lines 42- column 4

line 10).

16. It would have been obvious to one of ordinary skill in the art to provide the electron emitting device claimed in U.S. Patent 5,066,883 in a display device with phosphor as evidenced by Klopfer et al because Klopfer et al teaches the well known concept of providing electron emitting devices in a display device with phosphor.

17. The obviousness-type double patenting rejection is a judicially established doctrine based upon public policy and is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinct from claims in a first patent. In re Vogel, 164 USPQ 619 (CCPA 1970). A timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. § 1.78(d).

18. Claims 100,108, and 117-132 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112 and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Horabik whose telephone number is (703) 305-4812.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4900.

Michael Horabik
July 24, 1992

DONALD J. YUSKO
SUPERVISORY PATENT EXAMINER
ART UNIT 264